

No. 773,800.

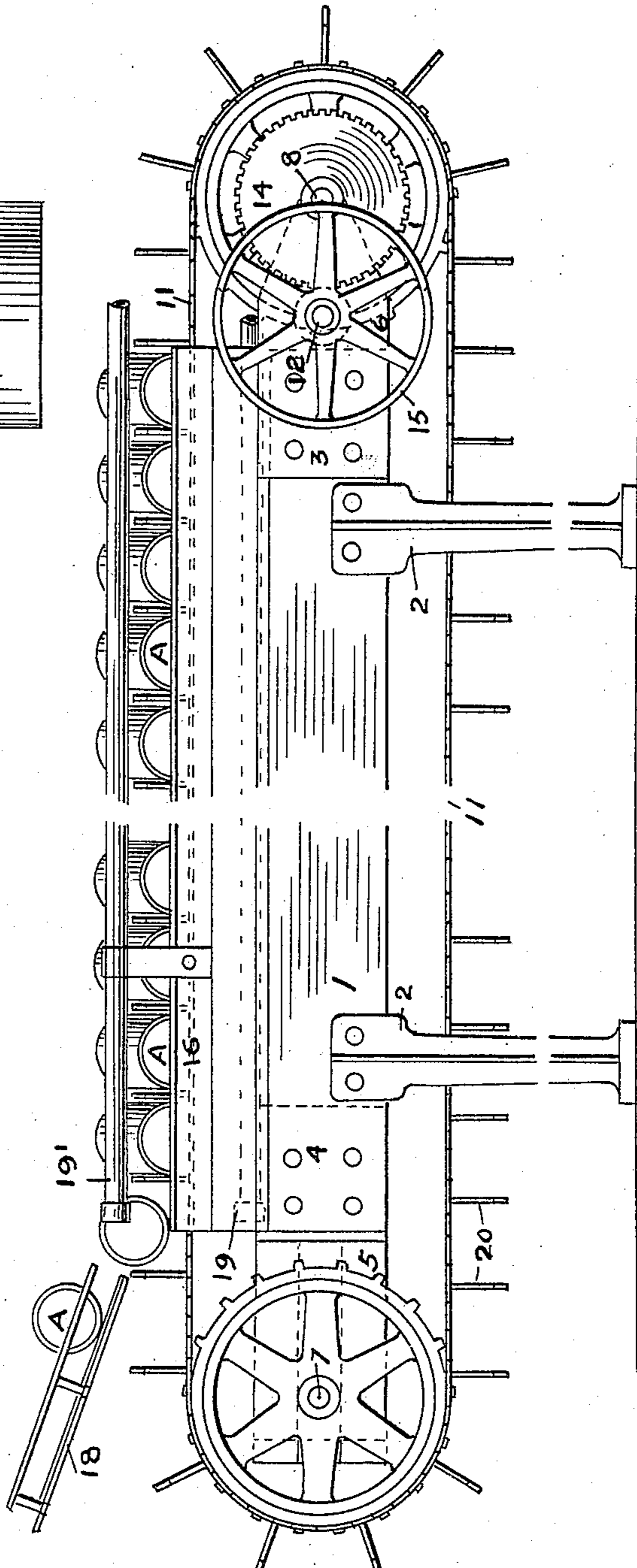
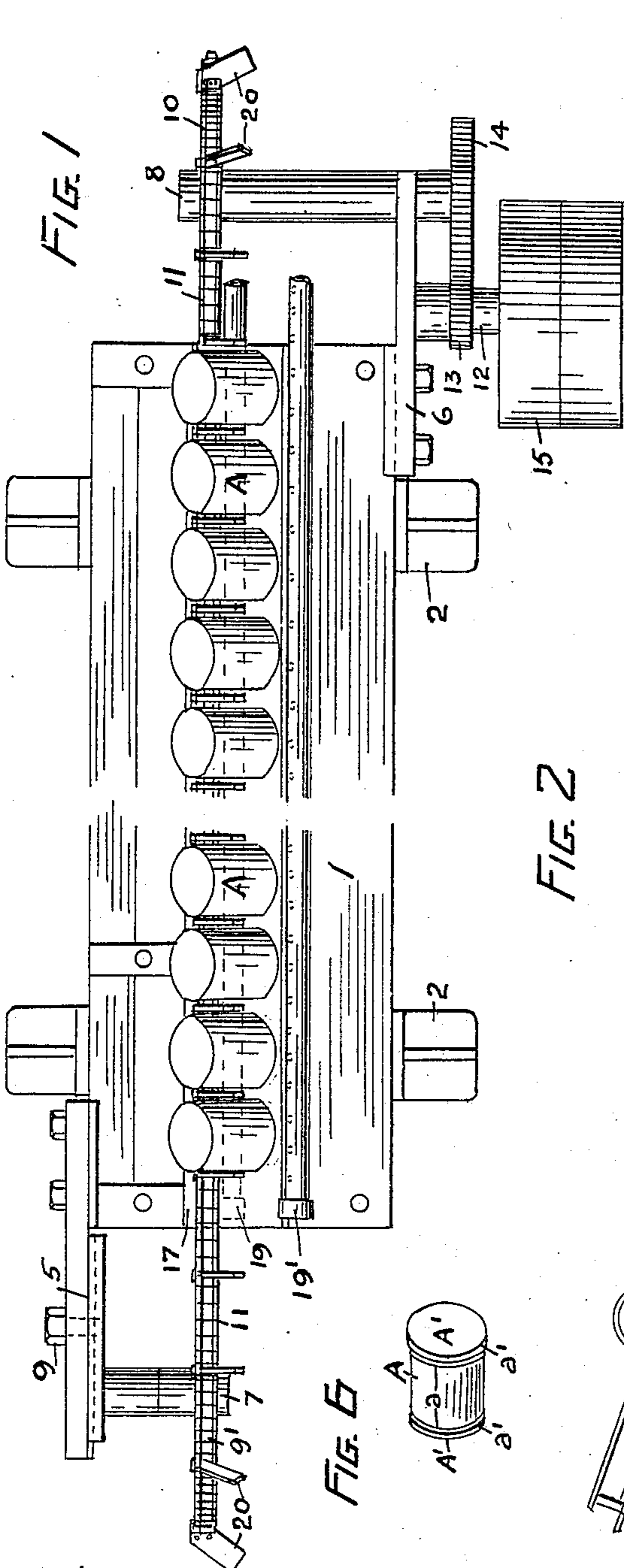
PATENTED NOV. 1, 1904.

A. LOTZ.
CAN FUSING MACHINE.

APPLICATION FILED OCT. 17, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:
Walter F. Vanier.
J. B. Richards.

INVENTOR:
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2 SHEETS—SHEET 2.

FIG. 3

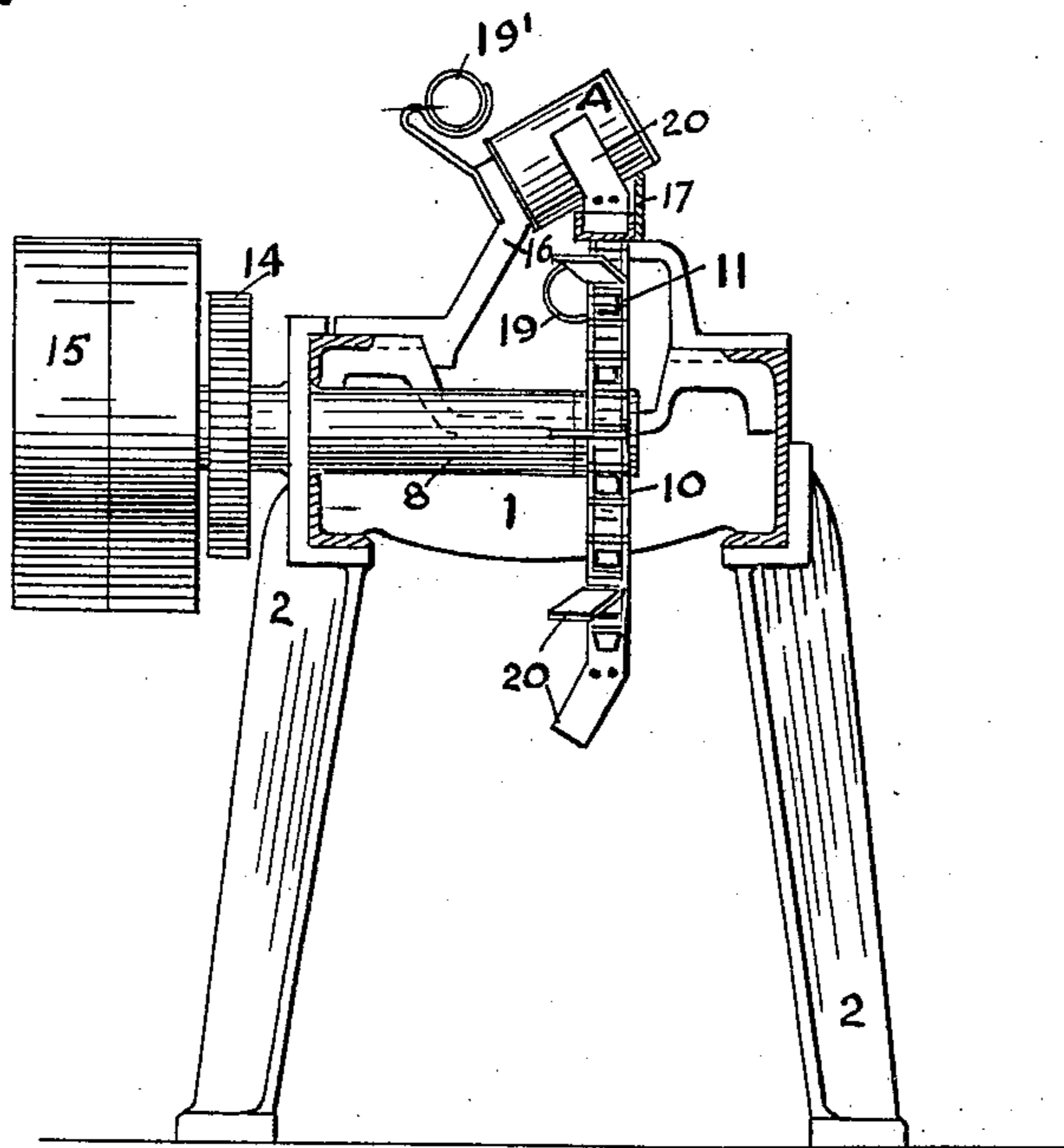


FIG. 4

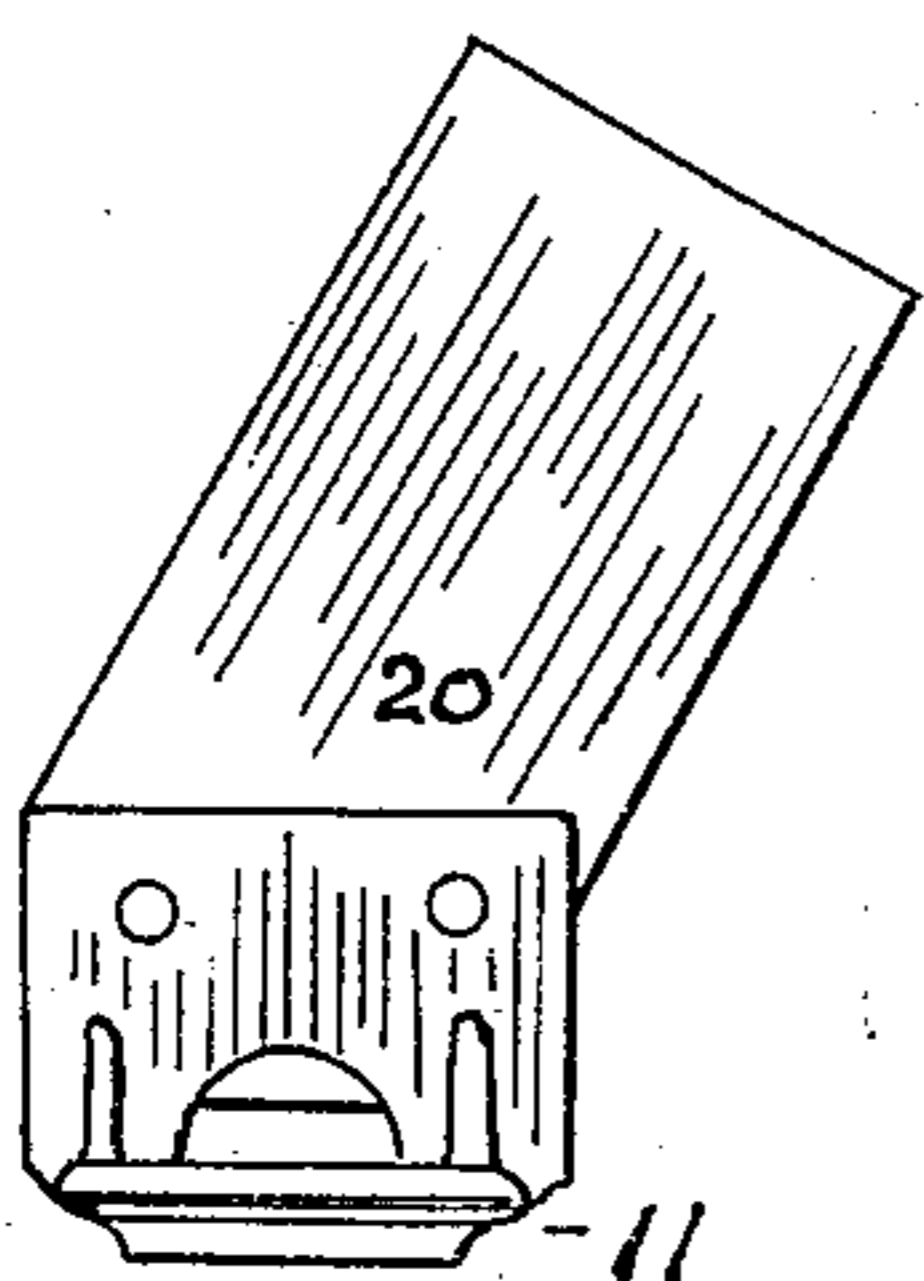
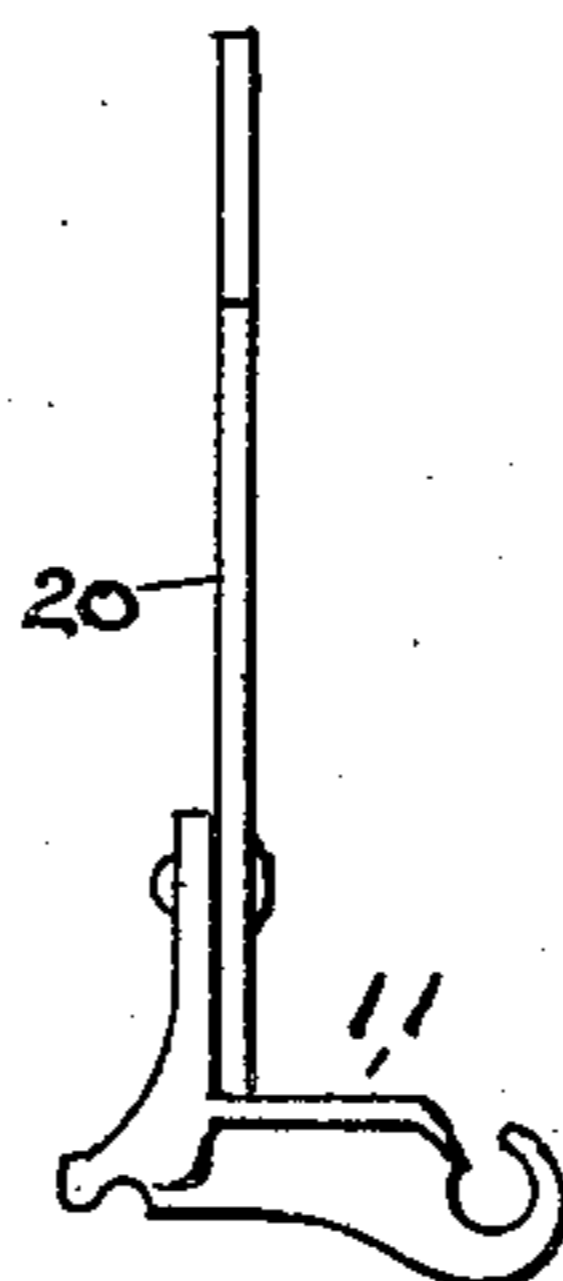


FIG. 5



WITNESSES:

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UNITED STATES PATENT OFFICE.

AUGUSTUS LOTZ, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO AMERICAN CAN COMPANY, OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF NEW JERSEY.

CAN-FUSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 773,800, dated November 1, 1904.

Application filed October 17, 1902. Serial No. 127,621. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS LOTZ, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented certain new and useful Improvements in Can-Fusing Machines; and I do hereby declare the following to be a full, clear, and exact description of the same.

The present invention is designed to fuse the ends or heads onto can-bodies, said bodies being delivered to the fusing-machine with the ends applied thereto and a thin strip or ribbon of solder secured to the end portions of the can-body, the invention consisting in so constructing the can runway and propelling means for the cans as to provide for the escape of a head freed from the traveling cans, thereby preventing a clogging of the cans, which results by a freed head lodging within and blocking the runway, and in so arranging the propelling means as to relieve the cans of the weight thereof, whereby injury or damage to the cans as propelled through the machine is provided against, thereby reducing the output of leaky or defective cans.

The usual means for propelling the cans through an end-soldering machine consists of an endless-chain conveyer which bears upon the upper surface of the cans and by reason of its weight holds the cans onto the can-guideway and forces the cans to rotate thereon, the cans being held between the chain conveyer and the guideway. The objection to this manner of conveying the cans through the soldering mechanism is that the weight of the conveyer mashes a number of the cans which it propels through the soldering mechanism, thereby causing the discharge of a number of defective and leaky cans. The present invention is designed to overcome this defect incident to end-soldering machines. It consists of an endless conveyer provided with a series of independent seats for the cans, within which seats the cans rotate freely as carried through the can-guideway, the rotation of the cans being due to their weight solely bearing upon the guideway while being acted upon by the propelling strain of the conveyer. Instead of the

endless conveyer rotating the ends of the cans in contact with solder-applying mechanism it exposes the end portion of the cans to the action of heating means which melts a ribbon of solder previously applied to the cans, so that the same may flow into the end joint of the rotating cans to solder the ends thereto.

To comprehend the invention, reference should be had to the accompanying sheet of drawings, wherein—

Figure 1 is a plan view of the machine. Fig. 2 is a side view thereof. Fig. 3 is an end view of the fuser viewed from the discharge end thereof. Fig. 4 is a detail view of a section of the can-conveyer. Fig. 5 is a side view in elevation of the device disclosed by Fig. 4 of the drawings, and Fig. 6 is a perspective view of the can with the ends applied thereto and the ribbons of solder in position to be fused into the end joints of the can.

In carrying out the invention the can-bodies A are first run through a suitable machine (not shown) that applies a band or ribbon α of solder to the surface thereof a slight distance from the end of the can-body equal to the depth of the flange α' of the can heads or ends A', which heads or ends are then applied to the open ends of the can-body. When thus soldered and headed or ended, the cans are ready to be subjected to the action of the fusing-machine in order that the ribbon α of solder may be melted and run into the joint of the can ends or heads.

The fusing-machine comprises a suitable frame 1, supported by standards or legs 2. To brackets 3 4, projecting from each end of the frame, the bearings 5 6 are secured, within which work the cross-shafts 7 8. The bearing 5 for shaft 7 is adjustably secured to bracket 3 by means of set-screw 9, so that longitudinal adjustment may be given thereto. To the shaft 7 is attached a sprocket-gear 9' and to shaft 8 a similar gear 10. Over these gears work the endless-chain conveyer 11, the tension of which is regulated by means of the adjustable bearing 5. The endless conveyer works within the frame 1, being driven from drive-shaft 12 by means of pinion 13, secured

